

REMARKS

Reconsideration of this application is requested.

The claims in the case are claims 1 and 4-14. Of these claims, claims 1, 7-11 and 13 have been rejected while claims 4-6, 12 and 14 have been objected to as being dependent on rejected base claims. It is presumed that claims 4-6, 12 and 14 are allowable subject to the dependency objection.

Regarding the claim objections, the applicants do not understand the Examiner's objection to claims 12 and 14 as being dependent on a rejected claim because these claims are themselves independent. Accordingly, withdrawal of the objection to claims 12 and 14 is requested.

The dependence of claims 4-6 based, directly or indirectly, on claim 1 has been maintained, as it is thought, for reasons noted below, that claim 1 should be allowed.

Claim 13, which depended from both claims 1 and claim 12, has been amended to depend only from claim 12. Claim 13 should, therefore, be allowable.

The Examiner is respectfully requested to reconsider the Section 103(a) rejection of claims 1, 7-11 and 13 as unpatentable over JP 62-212395 ("JP 395"). The amendment of claim 13 to depend from claim 12 moots the issue with respect to claim 13. However, it is respectfully submitted that the rejected claims define a process which is not in any sense obvious from JP 395.

The unobviousness of the applicants' invention is highlighted by the attached declaration of Dr. Satya Kuchimanchi, Associate Director in the Process Development Group of the applicants' assignee Avecia Biotechnology Inc.

As the Examiner will appreciate, the applicants' process is characterized by the use of the same hydrocarbon solvent for reactions (a) and (b), preferably toluene.

JP 395 mentions the possibility of using toluene as one of a number of possible solvents. However, this indicated use is clearly only speculative as the obviously preferred and only exemplified solvent is ether and the consistent message of the prior art is that the preferred solvent for the type of synthesis involved is ether. This is the clear teaching of JP 395 and also much of the other art. Additionally, while JP 395 mentions the possible use of toluene, JP 395 provides no motivation for the skilled person to select the use of toluene in both steps of the synthesis and the specific phosphorus protecting groups of the claims of the present application. Further, there is nothing in JP 395 or any of the other art of record that would cause the skilled person to expect the surprisingly higher yield which the applicants obtain

with the processes of the present invention when compared with those achieved using the preferred solvent of both UP 395 and indeed, the prior art generally.


The unexpected results obtained by the applicants are brought out in ¶ 5 of the attached Kuchimanchi declaration. As there shown, Example 3 of JP 395, which uses ether as solvent in both steps of the process, gives a yield of 42%. On the other hand, the declarant notes that Example 1 of the present application achieves an isolated yield of 53% of the same product that is produced in Example 3 of JP 395. This represents an improvement in yield of over 25% compared with process of JP 395. As noted by the declarant, the 25% improvement which the applicants obtain with their process is clearly unexpected.

In view of the foregoing, the applicants submit that claims 1, 7-11 and 13 define subject matter which is unobvious and should be patentable. Accordingly, reconsideration and withdrawal of the rejection based on JP 395 is requested.

The application is thought to be in allowable condition and such action is requested.

Respectfully submitted,

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